

IN THE CLAIMS:

Please add new claim 13 as follows:

1. (Previously Presented) A synchronous signal generator converting output which is a sine wave from a crystal oscillator of an oscillation frequency  $f$  into a pulse of a rectangular wave from by a pulse converter, wherein

the output which is a sine wave from the crystal oscillator is passed through a filter equal to the oscillation frequency  $f$  in center frequency  $f_0$ , and is input into the pulse converter.

2. (Original) The synchronous signal generator according to claim 1, wherein

said filter is a crystal filter equal to the crystal oscillator in frequency-temperature characteristic.

3. (Original) The synchronous signal generator according to claim 2, wherein

respective crystal pieces used for the crystal oscillator and the crystal filter have an equal cutting angle.

4. (Original) The synchronous signal generator according to claim 1,  
wherein

said oscillation frequency  $f$  is equal to a frequency of a fundamental wave component output from the crystal oscillator.

5. (Original) The synchronous signal generator according to claim 1,  
wherein

said pulse converter is a complementary output driver IC.

6. (Previously Presented) A synchronous signal generator, comprising:  
a crystal oscillator unit oscillating an output signal having an oscillation frequency  $f$ ;

a filter unit converting an output signal from the crystal oscillator unit into a signal close to an ideal sine wave having the oscillation frequency  $f$ , and outputting the converted signal; and

a pulse conversion unit outputting a pulse of a rectangular waveform based on output of said filter unit.

7. (Original) The synchronous signal generator according to claim 6, wherein

said filter unit converts the signal such that a level of specific frequency component in the output signal from said crystal oscillator unit can be relatively higher than levels of other frequency components, and outputs a resultant signal.

8. (Original) The synchronous signal generator according to claim 7, wherein

said filter unit is a band pass filter having an oscillation frequency of said synchronous signal generator as a center frequency.

9. (Original) The synchronous signal generator according to claim 6 wherein

said filter unit is equal to said crystal oscillator unit in frequency-temperature characteristic.

10. (Original) The synchronous signal generator according to claim 9 wherein

said filter unit is formed by a crystal filter equal to said crystal oscillator unit in cutting angle of crystal piece.

11. (Previously Presented) A synchronous signal generator, comprising:  
crystal oscillator means for oscillating an output signal having an oscillation frequency of  $f$ :

filter means for converting an output signal from the crystal oscillator means into a signal close to an ideal sine wave having the oscillation frequency  $f$ , and outputting the converted signal; and

pulse conversion means for outputting a pulse of a rectangular waveform based on output of said filter means.

12. (Previously Presented) A synchronous signal generating method obtaining a synchronous signal from output of crystal oscillator unit oscillating an output signal having an oscillation frequency  $f$ , comprising:

converting an output signal [closed] close to an ideal sine wave having the oscillation frequency  $f$ ; and

converting the converted signal into a pulse signal of a rectangular waveform.

13. (New) The synchronous signal generator according to claim 1, wherein

a circuit of said filter has a center frequency equal to an initial basic frequency of the crystal of said crystal oscillator.